--70. An audience rating system for digital television and radio, comprising the steps of:

extracting at least one identification code for at least one digital stream of a first channel, from a control stream of a multiplexed digital transmission, when reception of the first channel by a receiver begins;

recording at least one identification code extracted and thus time reception of the first channel begins;

extracting at least one identification code for at least one digital stream of any subsequent channel, from the control stream of the multiplexed digital transmission, when reception of the subsequent channel by the receiver begins; and

recording at least one identification code extracted and the time reception of the subsequent channel begins.

71. The audience rating system of claim 70, further comprising the step of recording the time that reception by the receiver is ended.

72. A system for recording reception of pay programs on digital television and radio, comprising the steps of:

extracting at least one identification code for at least one digital stream of a first channel, from a control stream of a multiplexed digital transmission, when reception of the first channel by a receiver begins;

recording at least one identification code extracted and the time reception of the first channel begins;

extracting at least one identification code for at least one digital stream of any

-2-

9   subsequent channel, from the control stream of the multiplexed digital transmission,

10   when reception of the subsequent channel by the receiver begins; and

11   recording at least one identification code extracted and the time reception of

12   the subsequent channel begins.

1   73.   The system for recording reception of claim 72, further comprising the

2   step of recording the time that reception by the receiver is ended.

1   74.   An apparatus for audience rating of digital television and radio,

2   comprising:

3   means for extracting at least one identification code for at least one digital

4   stream of a first channel, from a control stream of a multiplexed digital transmission,

5   when reception of the first channel by a receiver begins;

6   means for recording at least one identification code extracted and the time

7   reception of the first channel begins;

8   means for extracting at least one identification code for at least one digital

9   stream of any subsequent channel, from the control stream of the multiplexed digital

10   transmission, when reception of the subsequent channel by the receiver begins; and

11   means for recording at least one identification code extracted and the time

12   reception of the subsequent channel begins.

1   75.   The apparatus of claim 74, further comprising means for recording the

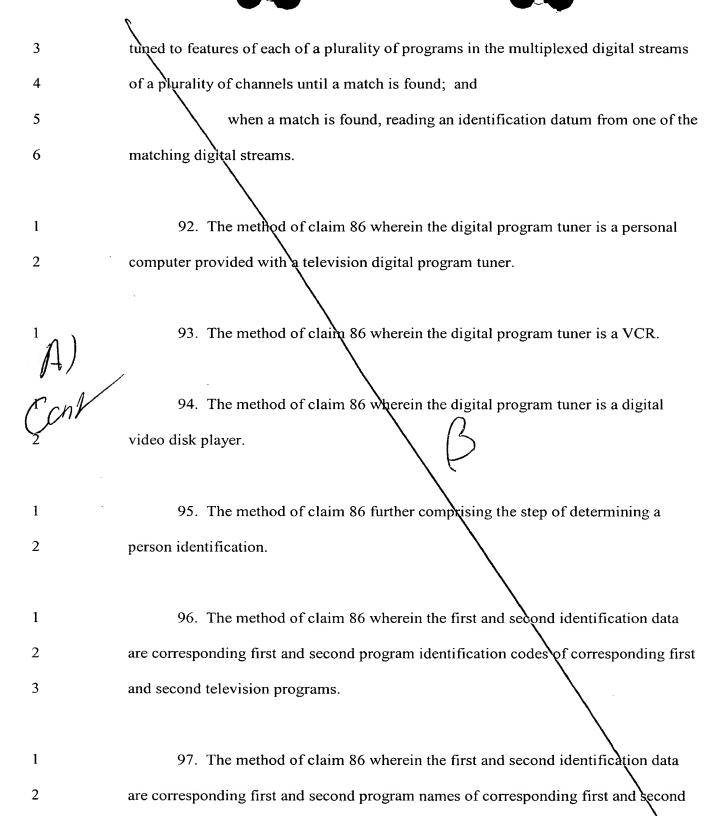2   time that reception by the receiver is ended.

1   76.   An audience measurement method for digital programming,

2   comprising the steps of:

3   extracting at least one identification code from at least one digital multiplexed

4   stream of a first program when reception of the first program by a receiver begins;

5   recording the at least one identification code and the time that reception of the

6   first program begins;

7   extracting at least one identification code from at least one digital multiplexed

8   stream of any subsequent program when reception of the subsequent program by the

9   receiver begins; and

10   recording the at least one identification code and the time that reception of the

11   subsequent program begins.

1   77. A method of determining audience ratings in connection with digital

2   programming comprising the following steps:

3   a) reading a first identification datum from a multiplexed digital stream

4   corresponding to a first program tuned by a digital program tuner;

5   b) time stamping the first identification datum;

6   c) subsequently reading a second identification datum from a

7   multiplexed digital stream corresponding to a second program tuned by the digital

8   program tuner; and,

9   d) time stamping the second identification datum.

1   78. The method of claim 77 wherein the first and second identification data

2   are ancillary codes.

-4-

79. The method of claim 77 wherein the first and second identification data are packet codes.

80. The method of claim 77 comprising the further step of time stamping a time when the digital program tuner is turned off.

81. The method of claim 77 comprising the following further steps:

comparing features of a program to which the digital program tuner is tuned to features of each of a plurality of programs in the multiplexed digital streams of a plurality of channels until a match is found; and

when a match is found, reading an identification datum from one of the matching digital streams.

82. The method of claim 81 wherein the features are audio features.

83. The method of claim 77 wherein the first and second identification data are stored in a memory of a meter.

84. The method of claim 77 wherein the first and second identification data are transmitted to a computer.

85. The method of claim 77 wherein step a) comprises the step of reading the first identification datum from a data packet contained in digital television programming, and wherein step c) comprises the step of reading the second

-5-

4   identification datum from a data packet contained in digital television programming.

1   86. The method of claim 77 wherein steps a) and c) are implemented by a

2   software agent, wherein the first and second identification data identify corresponding

3   television programs, and wherein the software agent is stored in a computer readable

4   memory.

1   87. The method of claim 86 wherein the first and second identification data

2   are read by the software agent from data packets contained in digital television

3   programming.

1   88. The method of claim 86 wherein the software agent is stored in a computer

2   readable memory of a device providing an analog television signal to an analog

3   program tuner.

1   89. The method of claim 86 wherein the digital program tuner is a digital

2   television.

1   90. The method of claim 89 wherein the digital program tuner is a digital

2   television, and wherein the software agent is stored in a computer readable memory of

3   a device providing a digital television signal.

1   91. The method of claim 90 further comprising the following steps:

2   comparing features of a program to which the digital program tuner is

3   tuned to features of each of a plurality of programs in the multiplexed digital streams

4   of a plurality of channels until a match is found; and

5   when a match is found, reading an identification datum from one of the

6   matching digital streams.

1   92. The method of claim 86 wherein the digital program tuner is a personal

2   computer provided with a television digital program tuner.

1   93. The method of claim 86 wherein the digital program tuner is a VCR.

1   94. The method of claim 86 wherein the digital program tuner is a digital

2   video disk player.

1   95. The method of claim 86 further comprising the step of determining a

2   person identification.

1   96. The method of claim 86 wherein the first and second identification data

2   are corresponding first and second program identification codes of corresponding first

3   and second television programs.

1   97. The method of claim 86 wherein the first and second identification data

2   are corresponding first and second program names of corresponding first and second

3   television programs.

1   98. The method of claim 86 wherein the first and second identification data

2   are corresponding first and second addresses of corresponding first and second

3   Internet pages.

1   99. The method of claim 86 wherein the first and second identification data

2   are corresponding first and second identification codes of corresponding first and

3   second Internet pages.

1   100. The method of claim 86 wherein the first and second identification data

2   are corresponding first and second banners of material viewed by an audience.

1   101. The method of claim 86 wherein the first and second identification data

2   are corresponding first and second signatures extracted from corresponding first and

3   second television programs.

1   102. The method of claim 86 wherein the software agent is arranged to detect

2   window activities conducted by an audience.

1   103. The method of claim 86 further comprising the step of transmitting the

2   first and second identification data to a remotely located central office.

1   104. The method of claim 103 wherein the transmitting step comprises the

2   step of transmitting of the first and second identification data using a serial port.

1   105. The method of claim 103 wherein the transmitting step comprises the

2   step of transmitting of the first and second identification data using a parallel port.

1   106. The method of claim 103 wherein the transmitting step comprises the

2   step of transmitting of the first and second identification data using a universal serial

3   bus.

1   107. The method of claim 103 wherein the transmitting step comprises the

2   step of transmitting of the first and second identification data using a firewire.

1   108. The method of claim 103 wherein the transmitting step comprises the

2   step of transmitting of the first and second identification data using an Internet service

3   provider.

1   109. The method of claim 103 wherein the transmitting step comprises the

2   step of transmitting of the first and second identification data using an intermediate

3   data collector.

1   110. The method of claim 109 wherein the transmitting step comprises the

2   step of transmitting of the first and second identification data using a telephone line.

1   111. The method of claim 109 wherein the intermediate data collector is an

2   Internet service provider.

112. The method of claim 109 wherein the intermediate data collector is a data collection facility located in the central office.

113. The method of claim 86 wherein the software agent is a software agent downloaded to the digital program tuner.

114. The method of claim 86 wherein the software agent is a plug-in software agent of the digital program tuner.

115. The method of claim 86 wherein the software agent is a floppy disk software agent of the digital program tuner.

116. The method of claim 86 further comprising the following steps:

    e) detecting audio codes in order to identify television programs;

    f) extracting audio signatures in order to identify television programs; and,

    g) selecting at least one of the steps e) and f) in order to identify a particular television program.

117. The method of claim 116 wherein steps a) and c) comprise the step of h) retrieving data packets from an output of the digital program tuner in order to identify television programs; and wherein step g) comprises the step of selecting at least one of the steps e), f), and h) in order to identify the particular television program.

-10-

1   118. The method of claim 86 wherein the software agent is arranged to log the

2   first and second identification data and an Internet identification datum associated

3   with an Internet task of a digital television receiving television programs.

1   119. The method of claim 77 wherein a television program is selected by a

2   viewer from among a plurality of television programs broadcast as a time division

3   multiplexed sequence of data packets in a broadcast channel, wherein the digital

4   program tuner is a television, wherein the viewer selected television program is

5   displayed on the television in a statistically selected location, and wherein the method

6   comprises the following further steps:

7   e) acquiring an audio portion of the viewer selected television

8   program;

9   f) recovering audio components respectively corresponding to the

10   television programs contained in the sequence of data packets; and,

11   g) comparing the audio components to the audio portion in order to

12   determine the viewer selected television program.

1   120. The method of claim 119 wherein step e) comprises the step of acquiring

2   the audio portion of the viewer selected television program from a speaker output of a

3   speaker associated with the television.

1   121. The method of claim 119 wherein step e) comprises the step of acquiring

2   the audio portion of the viewer selected television program from a connection to audio

3   processing circuitry associated with the television.

-11-

1   122. The method of claim 119 wherein step f) comprises the following steps:

2   acquiring an intermediate frequency signal from a viewer controlled

3   tuner associated with the television; and,

4   demodulating the intermediate frequency signal in order to receive the

5   data packets.

1   123. The method of claim 119 further comprising the steps of h) picking up a

2   local oscillator frequency signal from the television, and i) identifying the broadcast

3   channel from the local oscillator signal, wherein step e) comprises the step of

4   recovering the audio components from television programs contained in the identified

5   broadcast channel.

1   124. The method of claim 119 further comprising the step of identifying

2   persons in an audience of the viewer selected television program.

1   125. The method of claim 77 wherein a television program is selected by a

2   viewer from a set of television programs broadcast as multiplexed data packets in a

3   viewer selected broadcast channel, wherein the viewer selected television program is

4   displayed on a display portion of an apparatus tuned to the viewer selected broadcast

5   channel, and wherein the method comprises the following steps:

6   e) acquiring an audio portion of the viewer selected television

7   program;

8   f) recovering an audio component associated with one of the set of

9   television programs broadcast channels which the viewer may select;

-12-

10	g) comparing the audio portion with the audio component in order to

11	determine whether the audio portion and the audio component match;

12	h) storing a tuning record from at least one of the audio portion and the

13	audio component if the audio portion and the audio component match; and,

14	i) if the audio portion and the audio component do not match,

15	comparing the audio portion with an audio component of another of the set of

16	television programs broadcast in the broadcast channels which the viewer may select.

126. The method of claim 125 comprising the step of detecting the viewer

selected broadcast channel.

127. The method of claim 126 comprising the step of scanning the broadcast

2	channels which the viewer may select.

1	128. The method of claim 126 wherein step e) comprises the step of acquiring

2	an audio portion of the viewer selected television program using an audio probe.

1	129. The method of claim 128 wherein step f) comprises the step of scanning

2	through the set of television programs broadcast in the viewer selected broadcast

3	channel in order to recover the audio component associated with one of the set of

4	television programs broadcast in the viewer selected broadcast channel.

1	130. The method of claim 125 wherein step e) comprises the step of acquiring

2	an audio portion of the viewer selected television program using an audio probe.

-13-

131. The method of claim 130 wherein step f) comprises the step of scanning through the set of television programs broadcast in the viewer selected broadcast channel in order to recover the audio component associated with one of the set of television programs broadcast in the viewer selected broadcast channel.

132. The method of claim 125 wherein step f) comprises the step of scanning through the set of television programs broadcast in the viewer selected broadcast channel in order to recover the audio component associated with one of the set of television programs broadcast in the viewer selected broadcast channel.

133. The method of claim 77 further comprising the following steps:

reading a television program label in order to identify a viewer selected television program from among a plurality of time overlapped television programs broadcast in a viewer selected broadcast channel, wherein the viewer selected television program is displayed in a first window of a multi-window television display;

reading a file label from a file transmitted with the plurality of time overlapped television programs, wherein material corresponding to the file label is displayed in a second window of the multi-window display.

134. The method of claim 133 wherein the file is a data file.

135. The method of claim 133 wherein the file is an image file.

1   136. The method of claim 77 wherein the digital program tuner is a digital

2   television program reception apparatus, wherein the digital television program

3   reception apparatus has a data port, and wherein the first and second identification

4   data are read from among data provided on the data port.

1   137. The method of claim 136 wherein the digital television program

2   reception apparatus is a digital converter.

1   138. The method of claim 136 wherein the digital television program

2   reception apparatus is a personal computer.

1   139. The method of claim 136 wherein the digital television program

reception apparatus is a digital television set.

1   140. The method of claim 77 wherein the first and second programs are

2   contained in corresponding major channels.

1   141. The method of claim 77 wherein the first and second programs are

2   contained in corresponding minor channels.

1   142. The method of claim 77 wherein one of the first and second programs is

2   contained in a major channel and wherein the other of the first and second programs is

3   contained in a minor channel.

143. A television audience measurement system for identifying a viewer selected television program from among a plurality of television programs simultaneously broadcast in a broadcast channel, wherein the television audience measurement system comprises:

a channel detector that detects the broadcast channel in which the plurality of television programs is broadcast; and,

a comparitor that sequentially compares an audio component of the plurality of television programs broadcast in the detected broadcast channel with an audio signal of the viewer selected television program so as to identify the viewer selected television program.

144. The television audience measurement system of claim 143 wherein the audio signal is detected by a microphone disposed adjacent a television display.

145. The television audience measurement system of claim 143 wherein the audio signal is detected by an intrusive connection into equipment related to television viewing.

146. The television audience measurement system of claim 143 further comprising a program identification datum detector that detects, from the viewer selected television program, a program identification datum indicative of an identity of the viewer selected television program.

1   147. The television audience measurement system of claim 146 wherein the

2   program identification datum detector comprises a software agent resident in

3   equipment related to television viewing.

1   148. The television audience measurement system of claim 146 wherein the

2   audio signal is detected by a microphone disposed adjacent a television display.

1   149. The television audience measurement system of claim 146 wherein the

2   audio signal is detected by an intrusive connection into equipment related to television

3   viewing.

1   150. The television audience measurement system of claim 143 wherein the

2   comparitor is arranged to sequentially compare the audio component of the plurality

3   of television programs broadcast in the detected broadcast channel with the audio

4   signal of the viewer selected television program so as to identify the viewer selected

5   television program.

1   151. The television audience measurement system of claim 143 further

2   comprising a software agent arranged to detect, from the viewer selected television

3   program, a data element indicative of an identity of the viewer selected television

4   program.

1   152. The television audience measurement system of claim 151 wherein the

2   comparitor is arranged to sequentially compare the audio component of the plurality

3   of television programs broadcast in the detected broadcast channel with the audio

4   signal of the viewer selected television program so as to identify the viewer selected

5   television program.

1   153. An audience measurement system for identifying a digital program tuned

2   by a digital program receiver, wherein the digital program and a plurality of other

3   tunable digital programs are simultaneously transmitted to the digital receiver, and

4   wherein the audience measurement system comprises:

5   a scanning tuner arranged to sequentially tune through the plurality of

6   tunable digital programs and to provide outputs corresponding to the plurality of

7   tunable digital programs; and,

8   a comparitor that compares a component of the tuned digital program

9   with the outputs of the scanning tuner, that detects a match between the tuned digital

10   program and one of the outputs of the scanning tuner, and that reads a program label

11   carried in a bitstream associated with one of the tuned digital program and the

12   matching output of the scanning tuner, wherein the program label identifies the tuned

13   digital program.

1   154. The audience measurement system of claim 153 wherein the component

2   is an audio signal.

1   155. The audience measurement system of claim 154 wherein the audio signal

2   is detected by a microphone disposed adjacent the digital receiver.